

North Ada County Technical Working Group Meeting
Wednesday, October 7, 2009
1:00 pm – 4:00 pm

1) Introductions/Attendance:

List of attendees and affiliation...

2) Updates on the seismic investigation conducted by CGISS (D. Owsley):

a) Seismic line conducted along Farmer's Union Canal:

- 4 miles of data collected.
- Trailer mounted hammer energy source used.
- Line down Farmer's Union Canal up Little Gulch.

b) Good quality data:

- Data along canal high quality.
- Geophones ~ 5 meters apart, 4 blows @ each station.
- Little Gulch Data still being processed.
- Preliminary report by Lee Liberty (~ 2 mi of data along canal):
 - 1st line on data (~100 to 200 ft down) Water table.
 - 2nd line on data Mudstone dipping to W/SW @ 6° apparent dip.
 - 3rd line Bedrock.
 - 1920 ft bend lines up w/ fault identified by Wood in 2007.
 - Further investigation of this area needed to determine if fault

present or if curve in road causing bend in data set.

c) Update on remaining work:

- Vibrosis truck along Chaparral Rd. Work begins next week. Collect ~ 1 mi of data a day.
- Further investigation into profile along 1920 ft bend to determine if fault present.
- Final report due spring of 2010.
- Lee Liberty present seismic reflection data with both energy sources (hammer and Vibrosis) at next NACTWG meeting.

3) Updates on the geochemical investigation conducted by USGS (D. Owsley):

- 12 samples collected.
- Dissolved gases (N₂, Ar, CH₄, CO₂, O₂), Isotopes (C¹⁴, C¹³/C¹², O¹⁸/O¹⁶, H², H³), general water quality parameters, Nitrogen species, and CFCs. No metals.
- Results w/in 3 months
- Sites = 2 Willow Creek (Lynn Dom & Chaparral Irr), 3 intermediate wells (M3, Swafford, & Legacy), 3 shallow wells (3 domestic wells), and 1 Dry Creek (dom well). 2 substitutes from original schedule of site made due to sample collection unavailability at the Jeker & Floating Feather wells.

- If access to UWID Floating Feather well possible, USGS may attempt to sample that site in the near future.
- Sample depths ranged from ~ 60 ft to several 100 feet
- Report to be completed by May or June 2010. Will present data at next NACTWG meeting.

4) IDWR monitoring well siting and details (D. Owsley):

a) First of four monitoring clusters:

- Looking for area without existing large capacity well.

b) Access:

i) Public property is limited (long term access agreement):

- Suggested looking into right-of-way access through counties, etc.

USGS has constructed and monitored right-of-way well sites in the past.

ii) Location on City of Eagle (Friendship Park):

- Proposal sent, will go to city council.
- Nearby well depths vary 42 ft to ~ 900 ft

iii) Location with respect to existing production wells:

- Eagle Hills Golf Course closest large capacity well, ~ 1/2 mi.
- Brookwood (Eagle Brookwood) well NW of Friendship Park nearby.
- Recommend monitoring site where pumping is occurring (near large capacity wells).

- Considered monitoring site where pumping is occurring, but reconsidered due to Department requiring new developers to monitor, submit data, etc.

c) Construction details:

i) Two monitoring ports, one shallow, one deep/intermediate:

- Recommend target intermediate and deep zones for completion vs. shallow zone, because a lot of existing data on shallow wells in the area already.
- Recommend shallow zone important to monitor, because that is where home owners' concerns are.

ii) One larger borehole vs. two smaller:

(1) Cost differences:

- City of Eagle Monitoring Plan (2 deep, 1 intermediate, 1 shallow wells) all separate monitoring wells constructed for \$80,000.
- Cost difference probably a wash.

(2) Data reliability:

- If shallow & deep zones targeted, won't have comingling issues in single hole.
- 2 separate holes are simpler than one hole multi-completion wells.
- Recommend drill through target completion zone to get data below.

5) UWID proposed well and application (R. Dittus):

- New permit 3 cfs Municipal use to be filed end of 2009.
- Well site W of Floating Feather service area.
- New well for Lanwood Development (platted).

- ~3/4 mi N of Eagle's Legacy well.
- Depth range same as City of Eagle 350 to 500 ft.
- Plan on doing geo logs, pump tests, etc.
- Nearby wells mostly 100 ft, but a few deeper wells.
- IDEQ IDAPA testing standards to be used, but UWID is willing to discuss other standards/additional testing with IDWR if warranted.

6) Status of monitoring network and brief discussion of data currently collected (D. Owsley):

- 1 year of data collected.
- ~ 70 wells in network. 72 wells measured last round including 18 wells with data loggers.
- Few initial trends identified in hand measurements:
 - Can see in a few wells water levels increase in fall, which is opposite of the Treasure Valley wells (TV wells high in March).
 - Seasonal trends also evident in overall data logger data. ~ 1 to 2 ft loss of accuracy from data logger data to hand measurement data noted.
- Suggested compare this short term data set with Department's long term monitoring data.
- Continue monitoring ~ 70 wells until end of this program and then pick a subset of these wells to continue monitoring long term.

7) Upcoming tasks and update on revised work plan (D. Owsley):

a) Stream gage installation this winter:

- Contract approved.
- 3 sites identified: Spring Valley, Dry Creek, & Willow Creek (off Hwy 16). Spring Valley & Dry Creek sites are previous USGS sites.
- Suggested go further up Willow Creek drainage by reservoir off Bettis property. Reservoir feeds into South Fork Willow Creek.
- Land owners contacted.
- Installation of weirs w/ pressure transducers.
- Installation to occur this winter (hoping next month) by Jan or Feb.
- Department will conduct series of seepage analyses down Willow, Spring Valley, and Dry Creeks, correlate with USGS data collected.

b) Boise River measurements this fall:

- 1st of 4 measurements next month, 1st or 2nd week of November.
- 2nd set in February.

c) Modeling assessment recommendations due this fall from D. Cosgrove:

- Review of existing models. Intent not to criticize existing models, but rather to determine what action Department needs to take with regard to modeling needs.
- Models currently planned/budgeted: 1 NAC, 1 East Ada, and update to TV model.
- BOR working on possible update to TV model. Department meeting with BOR next week to discuss.
- Working on final report/conclusions.
- Contract ends December.

d) Updated work plan w/ budget:

- Itemized budget, schedule/deadlines, etc. updated.
- Update being reviewed at Department.
- Will present to committee once IDWR review complete.

8) Final Remarks, future topics to discuss:

- Next NACTWG meeting likely in January.
- Lee Liberty and/or Donna Cosgrove to present at next NACTWG meeting.
- Have preliminary geochemical data from USGS perhaps.